

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are available by contacting the ESSHQ Procedures Coordinator, Bldg. 911A*

## C-A OPERATIONS PROCEDURES MANUAL

### 15.5.51 Leak Rate Meter Calibration

(Vacuum Group Procedure VA-008.18.1.51)

Note: This document was formerly a C-A Group Procedure. The content of the group procedure was reviewed by the Technical Supervisor. All approvals and/or issue dates of the original group procedure are maintained for present use.

#### Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved:                     *Signature on File*                     \_\_\_\_\_  
 Collider-Accelerator Department Chairman                      Date

S. Gill

Vacuum Group Procedure VA-008.18.1.51  
Original Issue Date: 01/01/00  
Revision 01

**\*\*IMPORTANT\*\***

PRIOR TO THE PERFORMANCE OF ANY WORK  
WITHIN THE SCOPE OF THIS PROCEDURE, IT IS THE  
RESPONSIBILITY OF THE SUPERVISOR TO ENSURE  
THAT ***WORK PLANNING*** HAS BEEN REVIEWED FOR  
THE PROTECTION OF WORKERS, EQUIPMENT, AND  
THE ENVIRONMENT.

1. **PURPOSE:**
  - 1.1 To provide an effective procedure for AGS Vacuum Technicians to effectively verify the accuracy of the calibrated leak rate meter.
2. **RESPONSIBILITIES:**
  - 2.1 The AGS Vacuum Supervisor shall be responsible for the implementation of this procedure.
3. **DISCUSSION:**
  - 3.1 This procedure is written so that trained AGS Vacuum Technicians will be able to successfully & efficiently verify whether a calibrated leak rate meter is accurate or not.
4. **PRECAUTIONS:**
  - 4.1 LN<sub>2</sub> is extremely cold. Use caution when pouring.
5. **PREREQUISITES:**
  - 5.1 The technician shall have been trained in this procedure.
  - 5.2 Safety glasses must be worn while pouring LN<sub>2</sub>.
6. **OPERATIONAL PROCEDURE:**
  - 6.1 Using the calibrated leak meter that has been designated for calibration only, insert the meter into the leak detector port.
  - 6.2 Observe all precautions listed in procedure 8.18.1.23 (Leak Detector Calibration & Operation). Follow the calibration procedure as described
  - 6.3 Once the leak detector is calibrated, vent machine and insert the meter that must be calibrated.
  - 6.4 Open the leak meter, allowing helium into the leak detector and determine the leakrate of the meter, according to the now calibrated leak detector.
7. **ACCEPTANCE CRITERIA:**
  - 7.1 If the leak rate is within 10% of the printed value on the calibrated leak meter, you may certify its calibration.